

# PATENT COOPERATION TREATY

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference Voicemail View	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. PCT/GB2004/001805	International filing date (day/month/year) 22.04.2004	Priority date (day/month/year) 22.04.2003
International Patent Classification (IPC) or national classification and IPC H04M3/53, H04M3/51, H04M3/533		
Applicant <b>SPINVOX LIMITED et al.</b>		
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 8 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> <i>(sent to the applicant and to the International Bureau)</i> a total of 4 sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> <i>(sent to the International Bureau only)</i> a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).		
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application		
Date of submission of the demand 22.02.2005	Date of completion of this report 17.08.2005	
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Schweitz, M Telephone No. +31 70 340-4471	



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## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4)
    - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

### Description, Pages

1-3, 7-37	as originally filed
4-6	received on 14.06.2005 with letter of 10.06.2005

### Claims, Numbers

6-21	as originally filed
1-5	received on 14.06.2005 with letter of 10.06.2005

### Drawings, Sheets

1/13-13/13	as originally filed
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- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3.  The amendments have resulted in the cancellation of:
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-21
	No: Claims	
Inventive step (IS)	Yes: Claims	6, 16-20
	No: Claims	1-5, 7-15, 21
Industrial applicability (IA)	Yes: Claims	1-21
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1 The following documents are referred to in this communication:

D1: US-A-5 712 901 (MEERMANS DAVID R) 27 January 1998  
D2: US-B1-6 449 342 (JOHANSON JAMES A) 10 September 2002  
D3: KOUMPIS K ET AL: "An Advanced Integrated Architecture for Wireless Voicemail Data Retrieval" PROCEEDINGS. INTERNATIONAL CONFERENCE ON INFORMATION NETWORKING, 31 January 2001, pages 403-410

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matters of independent claims 1 and 21 do not meet the requirement of inventive step in the sense of Article 33(3) PCT.

2.1 Document D1 discloses a method for providing voicemail to a wireless device and for forwarding these messages to an operator of a voice-to-text transcription system (document D1, column 5, line 58 - column 6, line 6).

Furthermore, document D1 discloses method steps for playing back the message to a human operator (column 6, lines 18-23) at a console, which can be a general purpose computer (column 4, lines 55-57). Document D1 also discloses the human operator entering the voice message as text into the console (column 6, lines 23-26) and subsequently sending the text message to, for example, a wireless device (column 6, lines 58-63).

2.2 The subject-matter of the amended claim 1 differs from the disclosure in document D1 in that:

the wireless device which is the target of the call has been specified to be a mobile telephone;

and in that

the text message has been specified to be a SMS or MMS text message.

- 2.3 The technical effect of said features is that a transcribed voice message can be received on the wireless device to which the original call was directed.
- 2.4 The problem solved by said features, with respect to document D1 (especially with reference to the passage in column 6, lines 58-63 of this document), can therefore be defined as how to combine the target device for the voice call (in document D1 the "conventional voice phone") and the target device for the transcribed voice message (in document D1 the "pager") into one and the same device.
- 2.5 The solution to this problem, as presented by the subject-matter of claim 1, is trivial to the person skilled in the art when confronted with the disclosure in document D1, as it can be expected that such a skilled person would be well aware of the capabilities of a mobile telephone.
- 2.6 In addition, in document D3 (see page 403, column 2 and page 404, column 1), which was cited in the International Search Report and which can be found in the field of voice to text transcription of voice messages, an automated system for performing voice to text transcription of voice messages is disclosed. Document D3 further discloses how a voice message for a mobile telephone user is sent in a transcribed form as a text message using a Wireless Application Protocol Push Service. Document D3 further mentions the preferred choice of the authors to implement their system using SMS as the bearer for WAP.
- 2.7 It is therefore the opinion of this International Preliminary Examination Authority that the skilled person would, either directly, from the disclosure in document D1, or from the combination of the disclosures in documents D1 and D3, arrive at the solution to the problem as defined in 2.4 above and hence, the subject-matter of claim 1 does not involve an inventive step.
- 2.8 It should be observed that non-technical features, such as the initial selection of a

target device by a caller, resulting in a call directed to a specific type of device (e.g. a mobile telephone), does not constitute support for the presence of an inventive step (Article 33(3) PCT).

2.9 Claim 21 is independent and, because of its reference to other claims, actually defines 20 distinct claims (Rule 6.4 PCT).

2.10 Analogous to the analysis above for claim 1, the subject-matter of claim 21 in its reference to claim 1 does not involve an inventive step.

3 The subject-matters of dependent claims 2-5 and 7-15 do not meet the requirement of inventive step in the sense of Article 33(3) PCT for the reasons given below.

3.1 The subject-matter of claim 2 defines a method for linking a text-message to a voice message in order to allow a user to retrieve said voice message. Such a method is disclosed in document D2 (see column 6, lines 26-30 and figures 6 and 8).

3.2 The subject-matters of claims 3-5, 14 and 15 are considered trivial, as the technical features of these claims are well known from the technical fields of voicemail or email.

For the purpose of this examination, claim 15 is taken to depend on claim 1 as the dependency has been omitted in the claim.

3.3 The subject-matters of claims 7-9 are constituted of features which are defined by the content of information presented to the operator. Presentations of information are explicitly excluded from patentability (Rule 39.1(v) PCT) and hence, these features do not constitute support for an inventive step (Article 33(3) PCT).

3.4 The features of claims 10-13 are non-technical features as the method steps that they represent are performed by the operator. According to the same reasoning as in

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(SEPARATE SHEET)**

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paragraph 2.2, such features do not support the presence of an inventive step.

**Re Item VIII**

**Certain observations on the international application (clarity)**

- 1 The application does not meet the requirements of Article 6 PCT because claims 6 and 16 are not clear. Claim 15 is not concise (Article 6 PCT) with respect to the amended claim 1.
  - 1.1 The subject-matter in claim 6 does not define how the sought after technical effect is to be achieved. In fact the claim is merely describing said technical effect and contains no features leading to its implementation. As such, the subject-matter of claim 6 defines a result to be achieved.
  - 1.2 Claim 16 contains the feature of parsing the transcribed text message. The meaning of this feature is on its own not clear but when the actual examples given in claim 17, are taken into account, it can be understood to mean that an analysis is performed on the data included in the text message and that a part of that data is extracted for further use.
  - 1.3 The subject-matter of claim 15 does not fulfill the requirement of conciseness as it either repeats or contradicts the feature of the amended claim 1 stating that the text message is sent as an SMS or MMS.

**SUMMARY OF THE INVENTION**

In a first aspect, there is a method of providing voicemail to a mobile telephone, in which a caller initiates a voice call to the mobile telephone, but that call is diverted to a 5 voicemail server, with the caller then leaving a voice message on the voicemail server; the method comprising the steps of:

- (a) converting the voice message to an audio file format;
- (b) sending or streaming the audio file over a wide area network to a voice to text transcription system comprising a network of 10 computers;
- (c) one of the networked computers playing back the voice message to an operator;
- (d) the operator intelligently transcribing the original voice message into the computer to generate a transcribed SMS or MMS text 15 message;
- (e) the operator causing the transcribed SMS or MMS text message to be sent to the mobile telephone;
- (f) sending the SMS or MMS text message to the mobile telephone.

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Because human operators are used instead of machine transcription, voicemails are converted accurately, intelligently, appropriately and succinctly into text messages (e.g. SMS/MMS).

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There are many advantages to providing voicemails using this approach:

**A. It's written down for you**

- o No dialling in to retrieve messages; instead they are already accurately and intelligently (e.g. omitting hesitations, repetitions etc.) transcribed into a 30 message format.
- o See who the message is actually from before opening and reading it, giving the user an 'inbox' view of received voicemails and control over which ones they read, when, store, forward, delete, reply to, etc... A

converted voicemail will have a different icon from standard text messages. Where available, the Caller ID is used to populate the text message header with that number so it appears as if it came directly from that person. Otherwise, if the number is withheld, the recipient will see it is from 'SpinVox Voicemail'.

5

- o Key information is to hand – no fumbling for pen and paper when you are supposedly 'mobile'
  - Most new phones, particularly smartphones, they are able to parse the text and then provide useful parts of it for automatic use inside the phone and its applications saving the user copying across – e.g. a phone number is available for immediate storage or use, an address can be hyperlinked and added to a contact, or used to automatically locate the address on mapping software, etc...

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15 B. **It's discreet and convenient**

- o No annoying calls from voicemail when busy. Instead, a user sees voice messages arrive whilst in a meeting and reads them at his discretion.

C. **Message always gets to you**

- o SMS store & forward capacity guarantees fast delivery as soon as the user's phone is turned back on or back in coverage
- o Choose convenient delivery method : SMS, email, fax

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D. **Divert any other phone that supports call divert, for instance your office-phone (desk-phone) to the text conversion service**

- o Desk-phone & mobile voicemail can now both be delivered to a user's mobile as text – all in one place, conveniently to-hand
- o Access voicemail from any phone – mobile or landline – since the original voice files for voicemails are stored in servers accessible by password from any phone

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E. **Cheap voice-message delivery when roaming abroad**

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- o Users keep receiving voice-messages in text wherever they are
- o Users can receive them as email instead so that the user can pick it up world-wide and out of mobile coverage
- o No roaming charges or expensive dial-backs to retrieve messages

**Billing**

There are two choices – Pre-pay or post pay either via micro-billing on the user's phone bill or credit/debit card and direct debit monthly payments. In fact any payment method 5 available at the time via 3<sup>rd</sup> party Merchant Service providers, so even PayPal which is largely a US phenomenon is becoming available in Europe as a valid payment method.

**Credit/Debit Card**

Users will be able to sign-up with credit/debit cards for automatic monthly payments, 10 including Direct Debit (UK) and PayPal for the US.

**Micro-Billing**

Users will be able to buy SpinVox credit (e.g. £10's worth) via a single reverse billed SMS which will confirm their new credit. Typically this will appeal to the pre-paid market.

15 This neatly avoids the relatively expensive cost (60%+) of many individual micro-transactions each time they use the Services which otherwise make this too expensive and encourages some commitment from the user to the service.

**CLAIMS**

1. A method of providing voicemail to a mobile telephone, in which a caller initiates a voice call to the mobile telephone, but that call is diverted to a voicemail server, with the caller then leaving a voice message on the voicemail server; the method comprising the steps of:
  - (a) converting the voice message to an audio file format;
  - (b) sending or streaming the audio file over a wide area network to a voice to text transcription system comprising a network of computers;
  - (c) one of the networked computers playing back the voice message to an operator;
  - (d) the operator intelligently transcribing the original voice message into the computer to generate a transcribed SMS or MMS text message;
  - (e) the operator causing the transcribed SMS or MMS text message to be sent to the mobile telephone;
  - (f) sending the SMS or MMS text message to the mobile telephone.
2. The method of Claim 1 in which the transcribed text message includes a unique identification that links the text message to the voice message held at the voicemail server to allow that voice message to be played back to the wireless information device by an end-user selecting an option displayed on the device that relates to the transcribed text message.
3. The method of any preceding Claim in which the transcribed text message has added to it the time and date that the voice message was originally received at the voice mail server.
4. The method of any preceding Claim in which the voice message is originated at a mobile telephone or at a landline telephone.
5. The method of any preceding Claim in which the transcribed text message has added to it caller identification data, such as a telephone number or caller name.